

Tropical Forest Conservation:

Biodiversity, Illegal Logging,
and Natural Resource Management

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Monitoring Conservation Projects

- Debt-for-nature swap
- Canje de deuda por naturaleza
- Financed by US Government
 - Tropical Forest Conservation Act
 - 13 projects- Coast, Andes, Amazon
 - Local Peruvian NGOs
 - Non Governmental Organizations
 - Main problems: Illegal Logging, over-exploitation of natural resources

Forest Conservation on the Coast



- Tropical Dry Forest
- Algarrobo Trees
- Trees germinate in El Nino years
- No water, so roots grow very deep
- Climate regulation

Bosque de Pomac Historic Sanctuary, Lambayeque



- Base of the Sican culture
- Archeological Excavation
- Tropical Dry Forest
- Adobe Pyramids
- Endemic Species
- Illegal Logging
- Community Involvement Projects



Voluntary Park Guards



- A success story in community involvement
 - Communities used to log the forest
 - Now they protect it
 - 200+ Voluntary Park Guards
 - Rondas

Endemic Species



- Endemic species do not exist anywhere else
- Endemism → habitat preservation is especially important
- La Cortarrama
 - Bird endemic to Bosque de Pomac



Forest Conservation in the Andes



ECOAN: Bosques de *Polylepis*:

- ECOAN: Asociacion Ecosistemas Andinos
- High-Andean ecosystem: 3,800-5,000m
- Habitat for endemic birds
- Prevent soil erosion
- Retain nutrients in the soil
- Produce vital oxygen
- Polylepis is logged for building houses, firewood, and to create space for farming and pasture
- Eucalyptus- an invasive species
 - Grows rapidly, but causes soil erosion



Reforestation Project

Planting and conserving polylepis trees

- Donate ceramic ovens (cocinillas de arcilla) to communities
- Donate firewood
- Workshops on environmental education and reforestation
- Community nurseries(viveros) for polylepis trees



Forest Conservation in the Amazon

- Natural Resource Management plans in Reserva Nacional Pacaya Samiria in Loreto
 - Work with local communities and resource management groups
- Illegal Logging in the Amazon, around Alto Purus National Park
 - Strengthen the forest concessions system
 - Deter illegal logging



Management Plan: Aguaje Palm Trees



- Aguajes:
 - Carbon storehouses
 - Fruits important to forest food chains
 - Human consumption: 5 times more Vitamin A than carrots
- Management plan:
 - Instead of chopping them down
 - Climb palm trees to reach the fruit

Management Plan: Paiche fish



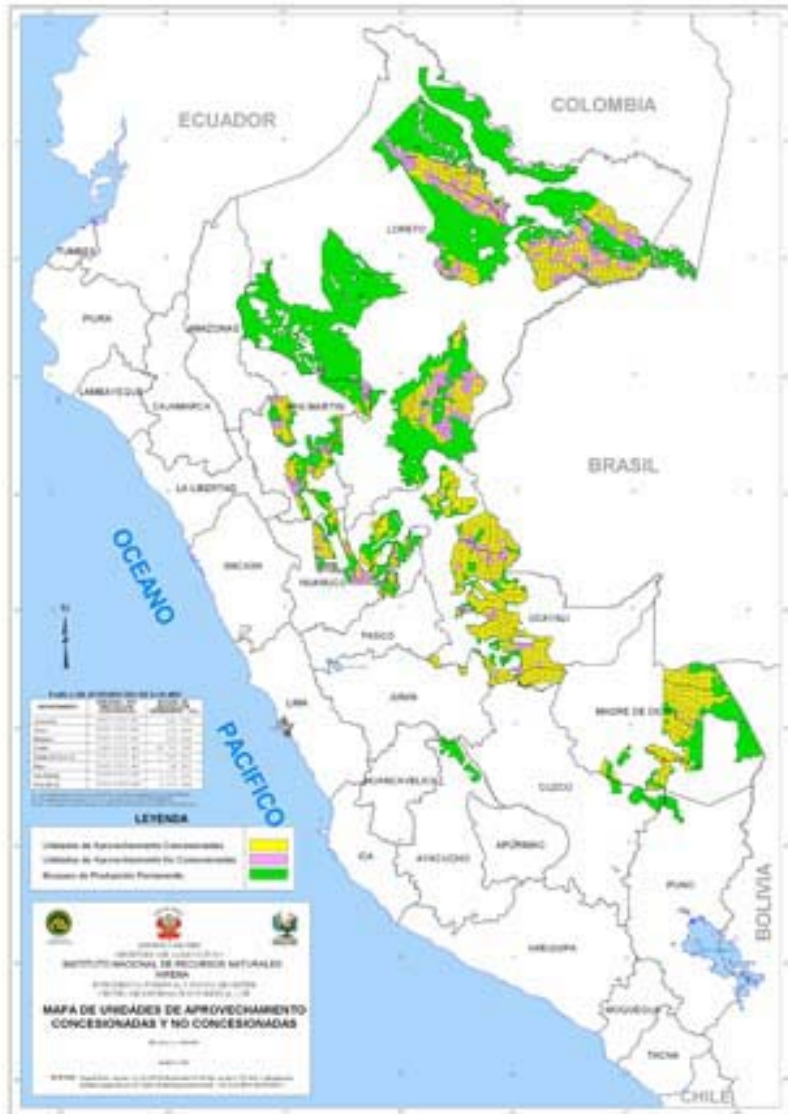
- Largest freshwater fish
- Sustainable fishing techniques
- Pilot Program, to be implemented in other rainforest communities

Management Plan: Taricaya Turtles



- Endangered Species
 - CITES
- Eat eggs, whole turtle
- Local management groups
- Raise eggs and let baby turtles go
- Keep a sustainable percentage of eggs to eat or sell

Peruvian Forestry



- Forest Concessions
- Instituto de Recursos Naturales (INRENA)
- Forest Management Plans for each concession
- Rivers are the highways
 - Transport Amazonian forest products by river

Illegal Logging in the Amazon



- The most profitable tree to log
 - Caoba = Mahogany = *Swietenia macrophylla*
- Export mahogany, USA largest importer
 - Luxury furniture
- Very little mahogany exists in forest concessions
 - Endangered Species (CITES)
- Obtain mahogany from inside National Parks
- Large groups of illegal loggers (armed) get mahogany from National Parks
- Limited enforcement capacity of INRENA



INRENA Guard Posts

- Control logging on Amazonian Rivers
- Secure INRENA's presence in the area
 - Supervise forest concessions
 - Deter illegal logging



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Thank You!!!

